We claim:

1. A nucleic acid having a nucleotide sequence selected from the group consisting of SEQ NO: 1 through SEQ NO: 82, or complements thereof.

2. The nucleic acid capable of specifically hybridizing to a nucleic acid of claim 1, or a complement thereof.

3. The nucleic acid exhibiting a percentage identity of between about 70% to about 90% with at least a 10 nucleotide region of the sequence of a nucleic acid of claim 2.

4. The nucleic acid exhibiting a percentage identity of between about 90% to about 99% with at least a 10 nucleotide region of the sequence of a nucleic acid of claim 3.

5. The nucleic acid as claimed in any one of claims 3 or 4 wherein said nucleic acid is detectably labeled.

6. The nucleic acid of claim 5 wherein said sequence is a marker of osteoarthritis progression.

7. The nucleic acid of claim 5 wherein said label is selected from the group consisting of radioactive, fluorescent, chemi-luminescent, and chromogenic agents, and magnetic particles.

8. A method of identifying a nucleic acid comprising contacting a hybridization probe as claimed in claim 5 with a sample containing nucleic acid and detecting hybridization to the hybridization probe.

9. A method of identifying a nucleic acid comprising contacting a PCR probe as claimed in claim 5 with a sample containing nucleic acid and producing multiple copies of a nucleic acid that hybridizes to the PCR probe.

10. A substantially-purified nucleic acid having at least one 10 nucleotide region substantially identical to a sequence identified in Table 1.

11. A recombinant DNA comprising a nucleic acid according to one of claims 1-4, or 8, wherein the recombinant nucleic acid further comprises a promoter or partial promoter region.

12. A host cell containing a nucleic acid as claimed in claim 10.

13. A method for producing and purifying a polypeptide, said method comprising the steps of:

a) culturing the host cell of claim 12 under conditions suitable for the expression of the peptide; and

b) recovering the polypeptide from the host cell culture.

14. A substantially-purified protein, polypeptide, or fragment thereof, wherein at least one 15 amino acid region is encoded by a nucleic acid as claimed in one of claims 1-4.

15. An antibody that specifically binds to a purified protein, polypeptide, or fragment thereof, having at least one region of 5 contiguous amino acids encoded by a nucleic acid as claimed in one of claims 1-4 or 10.

16. A transgenic animal having in one or more of its cells an introduced nucleic acid as claimed in one of claims 1-4 or 10, or progeny of the transgenic animal.

17. A cell taken from a transgenic animal or its progeny as claimed in claim 16.

18. A composition comprising a nucleic acid as claimed in one of claims 1-3, or a complement thereof.

19. A method of identifying a biologically active compound or composition comprising contacting the compound or composition with a sample comprising a protein, polypeptide, or fragment as claimed in 13, and comparing the interaction

between the compound or composition and the protein, polypeptide, or fragment with a control.

20. A compound or composition that is detectable in a method of claim 18.

21. A computer-readable medium having recorded thereon the sequence information of one or more of SEQ NO:1 through SEQ NO: 82 or complements thereof.

22. A method of identifying a nucleic acid comprising providing a computer-readable medium as claimed in claim 21 and comparing nucleotide sequence information using a computerized means.

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23. A substantially-purified nucleic acid molecule which comprises a nucleic acid sequence that is identical to at least 10 nucleotides of a nucleotide sequence selected from the group consisting of SEQ NO: 1 through SEQ NO: 82, or complements thereof.

24. A substantially-purified nucleic acid molecule which comprises a nucleic acid sequence that is identical to at least 50 nucleotides of a nucleotide sequence selected from the group consisting of SEQ NO: 1 through SEQ NO: 82, or complements thereof.

25. A substantially-purified nucleic acid molecule which comprises a nucleic acid sequence that is identical to at least 100 nucleotides of a nucleotide sequence selected from the group consisting of SEQ NO: 1 through SEQ NO: 82, or complements thereof.

26. A substantially-purified protein, polypeptide, or fragment thereof, of claim 13 wherein said substantially-purified protein, polypeptide, or fragment thereof is a fusion protein.

27. An antibody of claim that is detectably-labeled.

28. A transformed cell having a nucleic acid molecule of claim 1.

28. A transformed cell having the antisense of a nucleic acid molecule of claim 1.

29. A process for diagnosis or prognosis of osteoarthritis a mammal from the expression of mRNA or cDNA that is identical to at least 20 nucleotides of a nucleotide sequence selected from the group consisting of SEQ NO: 1 through SEQ NO: 82, or complements thereof.

30. A method of isolating a nucleic acid that is identical to at least 20 nucleotides of a nucleotide sequence selected from the group consisting of SEQ NO: 1 through SEQ NO: 82, or complements thereof.